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## Amendments to the Drawings:

The attached sheets of drawings includes changes to all figures except Fig. 3. These sheets, which includes Figs. 1A, 1B, 2, 3, 4A, 4B, 5A, 5B, 6, 7A, 7B, 7C, 7D, 8, 9, 10, 11A and 11B (a total of 13 sheets) replace the original sheets filed on November 17, 1999.

Attachment: Replacement Sheets

Annotated Sheets Showing Changes



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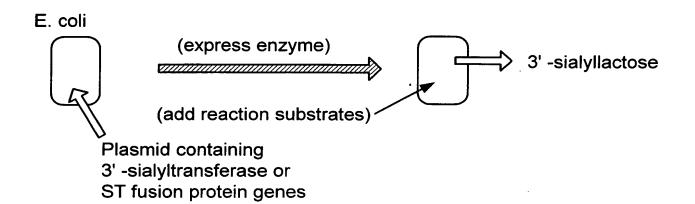


FIG. 1A.

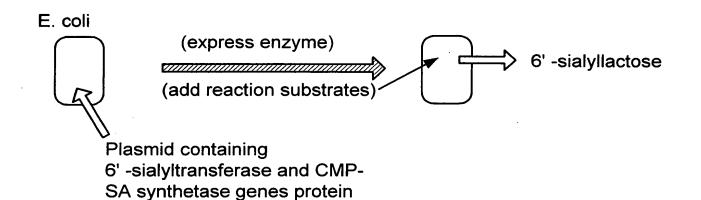


FIG. 1B.



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(express enzymes)
(add reaction substrates)

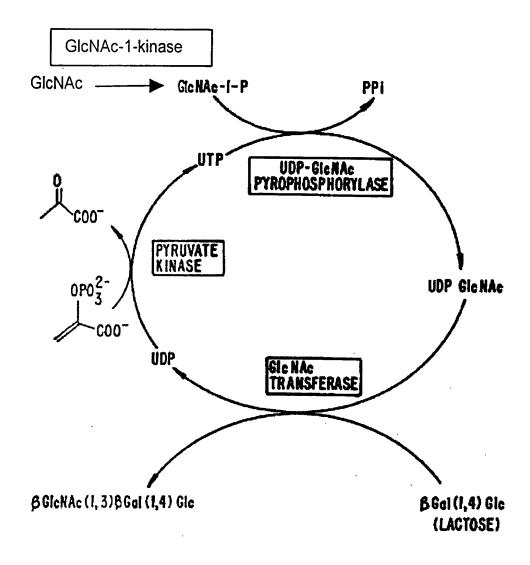
Coli

Plasmid containing
GlcNAc-transferase and
Galactosyltransferase genes

FIG. 2.

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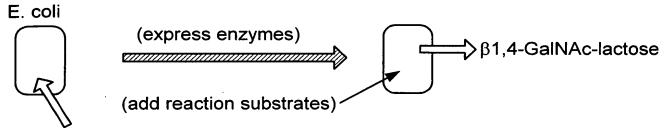
Figure 3





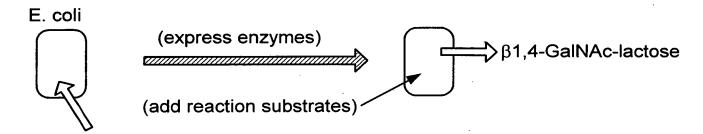
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Plasmids, one encoding  $\alpha$ 1,4-GalNAc-transferase, UDP-GalNAc epimerase, UDP-GlcNAc pyrophosphorylase genes and the second encoding GlcNAc-1-kinase, polyphosphate kinase and pyruvate kinase genes)

FIG. 4A.

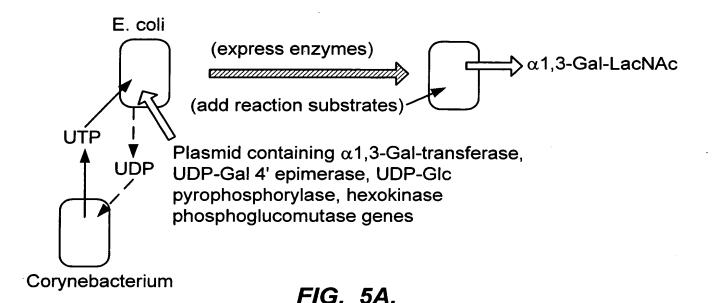


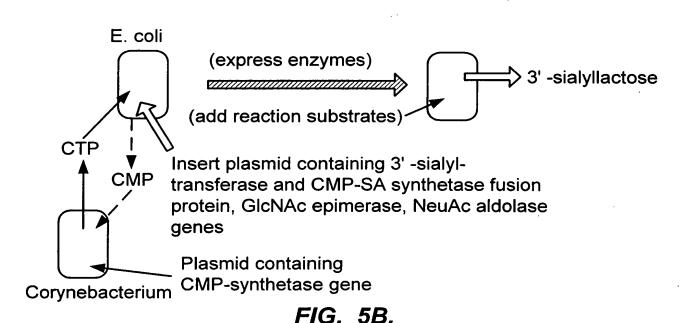
Plasmids containing beta 1,4-GalNActransferase, UDP-GalNAc pyrophosphorylase, GlcNAc 1-kinase, polyphosphate kinase and pyruvate kinase genes

FIG. 4B.



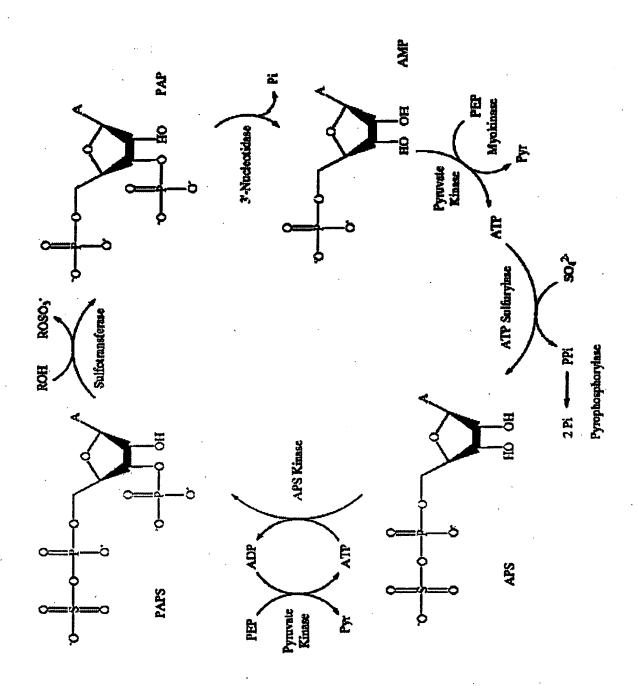
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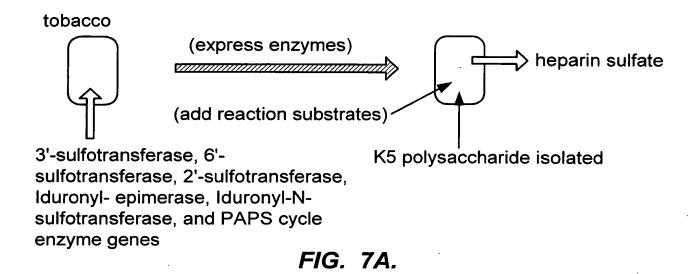
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**FIG. 6.** 



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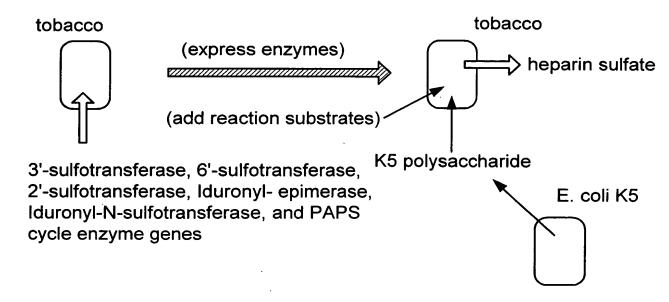
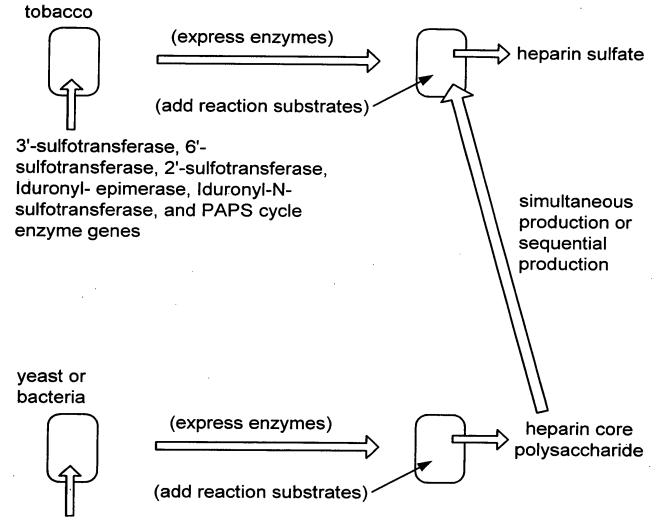


FIG. 7B.



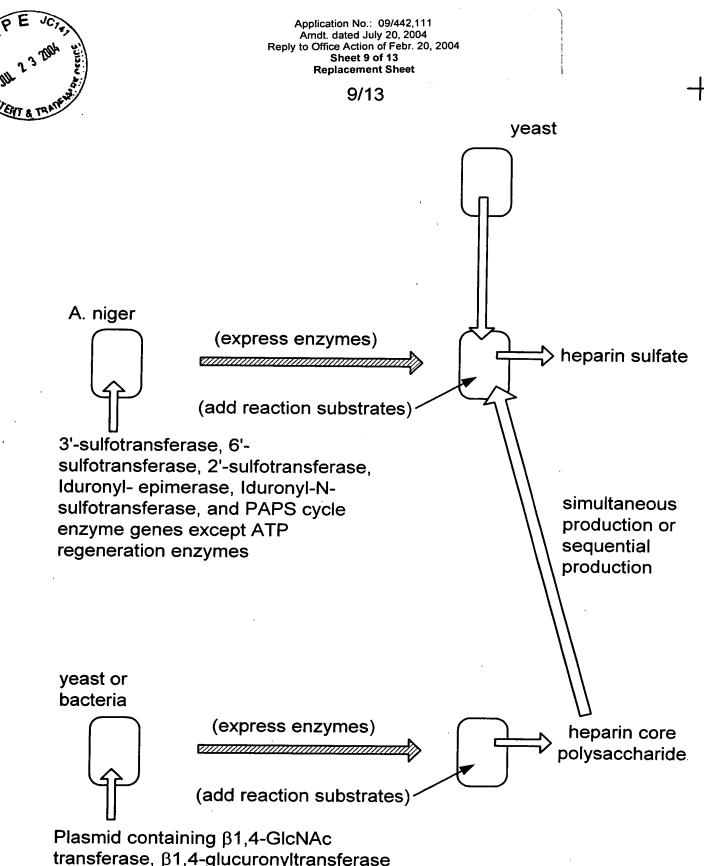
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Plasmid containing  $\beta$ 1,4-GlcNAc transferase,  $\beta$ 1,4-glucuronyltransferase and UDP-Glc dehydrogenase genes

FIG. 7C.



transferase, β1,4-glucuronyltransferase and UDP-Glc dehydrogenase genes

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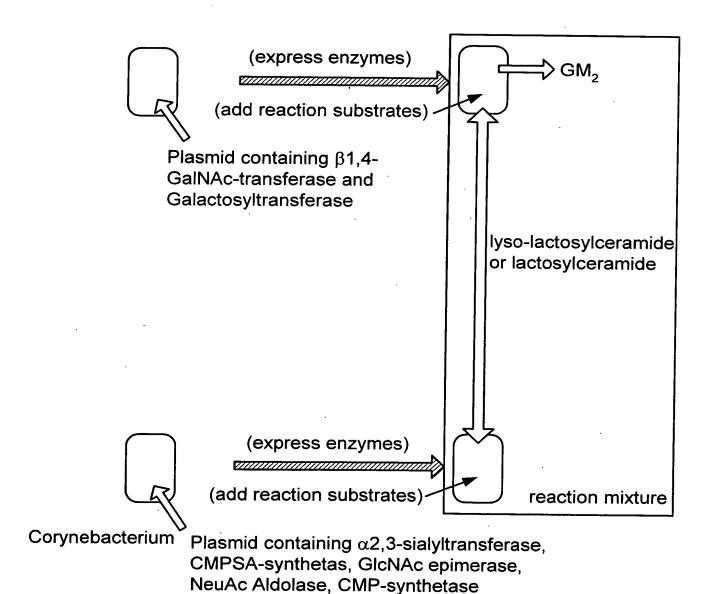


FIG. 8.



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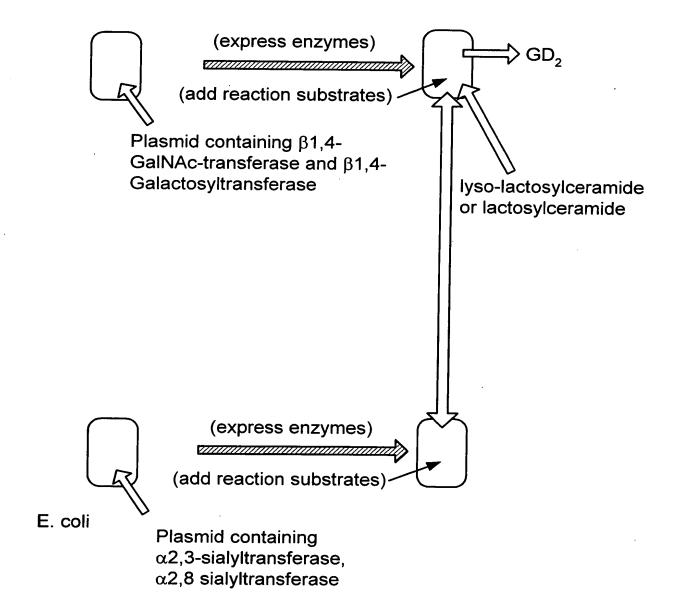


FIG. 9.



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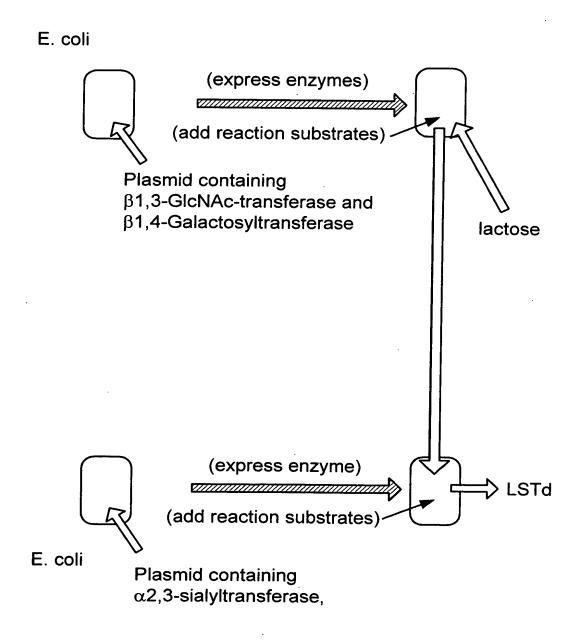


FIG. 10.



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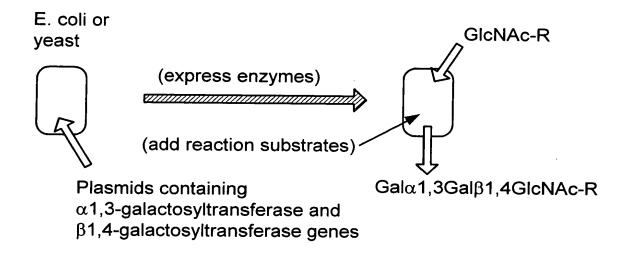


FIG. 11A.

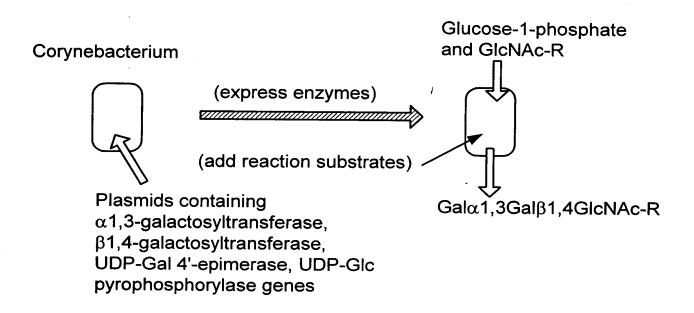


FIG. 11B.